

 FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE Information Disclosure Statement by Applicant <small>(Use several sheets if necessary)</small>	ATTY. DOCKET NO.	SERIAL NO
	RPI-103US	09/826,458
	APPLICANTS	
	Xi-Cheng Zhang et al.	
FILING DATE	GROUP	
April 5, 2001	2878	

U.S. PATENT DOCUMENTS

Exmr Initial		Document Number	Date	Name	Class	Sub Class	Filing Date

FOREIGN PATENT DOCUMENTS

Exmr Initial		Document Number	Date	Country	Class	Sub Class	Translation YES NO
SL		DE 196 29 583	01/29/98	Germany	—	—	
SL		EP 0 828 143	03/11/98	EPO	—	—	

OTHER DOCUMENTS
(Including Author, Title, Date, Pertinent Pages, Etc.)

		1)	Q. Wu et al., "Design and Characterization of Traveling-Wave-Electrooptic-Terahertz Sensors,"
			IEEE Journal of Selected Topics in Quantum Electronics, Vol. 2, No. 3, pp. 693-700 (Sept. 1996).
SL		2)	M. Tani et al., "Photoconductive Terahertz Transceivers," Electronics Letters, Vol. 36, No. 9, pp. 804-805 (April 27, 2000).
SL		3)	Q. Chen et al., "Electro-Optic Terahertz Transceiver," Electronics Letters, Vol. 36, No. 15, pp. 1298-1299 (July 20, 2000).
SL		4)	Q. Chen et al., "Electro-Optic Transceivers for Terahertz-Wave Applications," J. Opt. Soc. Am. B., Vol. 18, No. 6, pp. 823-831 (June 2001).
SL		5)	International Search Report dated September 6, 2001.

Examiner	SL Lee	Date Considered	3/10/03
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U.S. PATENT DOCUMENTS

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SL		3,824,717	07/1974	Evtuhov et al.	307	88.3	
SL		5,144,630	09/1992	Lin	372	22	
SL		4,510,402	04/1985	Summers et al.	307	427	
SL		4,755,820	07/1988	Backhouse et al.	343	700 MS	
SL		4,757,268	07/1988	Abrams et al.	330	4.3	
SL		4,759,820	07/1988	Calvert et al.	156	600	
SL		4,922,091	05/1990	Grischkowsky	250	211 J	
SL		5,332,918	07/1994	Smith et al.	257	431	
SL		5,355,247	10/1994	Byer et al.	359	330	
SL		5,377,043	12/1994	Pelouch et al.	359	326	
SL		5,493,719	02/1996	Smith et al.	455	325	
SL		5,543,960	08/1996	Carrig et al.	359	326	
SL		5,663,639	09/1997	Brown et al.	324	96	
SL		5,729,017	03/1998	Brener et al.	250	338.1	
SL		5,789,750	08/1998	Nuss	250	338.1	
SL		5,844,288	12/1998	Mourou et al.	257	431	
SL		5,894,125	04/1999	Brener et al.	250	330	
SL		5,937,118	08/1999	Komori	385	27	
SL		5,946,085	08/1999	Kawashima et al.	356	28	
SL		6,014,249	01/2000	Fermann et al.	359	341	
SL		6,038,060	03/2000	Crowley	359	328	

FOREIGN PATENT DOCUMENTS

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OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

SL	1)	Q. Chen, P. Y. Han, Z. Jiang, X.-C. Zhang, "Recent Development of Free-Space THz Imaging," <i>Invited Paper</i> , The 7 th International Conference on Terahertz Electronics, Nara, Japan, November 1999 (4 pages)
SL	2)	Q. Wu et al., "Free-space Electro-Optic Sampling of Terahertz Beams," <i>Appl. Phys. Lett.</i> 67, 3523 (1995)
SL	3)	Q. Wu et al., "Ultrafast Electro-Optic Field Sensors," <i>Appl. Phys. Lett.</i> 68, 1604 (1996)
SL	4)	Q. Wu et al., "Broadband Detection Capability of ZnTe Electro-Optic Field Detectors," <i>Appl. Phys. Lett.</i> 68, 2924 (1996)

Examiner	SL Lee	Date Considered	3/10/03
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U.S. PATENT DOCUMENTS

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SL	6,078,047	06/2000	Mittleman et al.	250	338.1	
SL	6,111,416	08/2000	Zhang et al.	324	753	
SL	6,144,679	11/2000	Herman et al.	372	21	

FOREIGN PATENT DOCUMENTS

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OTHER DOCUMENTS
(Including Author, Title, Date, Pertinent Pages, Etc.)

SL	5)	Q Wu et al, "Dynamic Range of an Electro-Optic Field Sensor and Its Imaging Applications, <i>Appl. Phys. Lett.</i> 68 , 3224 (1996)
SL	6)	Q. Wu et al., Two-Dimensional Electro-Optic Imaging of THz Beams," <i>Appl. Phys. Lett.</i> 69 , 1026 (1996)
SL	7)	Q. Wu et. al, "7 Terahertz Broadband GaP Electro-Optic Sensor," <i>Appl. Phys. Lett.</i> 70 , 1784 (1997)
SL	8)	P.Uhd Jepsen et al, "Detection of THz Pulses by Phase Retardation in Lithium Tantalate," <i>Phys. Rev. E</i> , 53 ,3052 (1996)
SL	9)	Nahata et al., "Coherent Detection of Freely Propagating Terahertz Radiation by Electro-Optic Sampling," <i>Appl. Phys. Lett.</i> 68 , 150 (1996)
SL	10)	Nahata et al., "Reshaping of Freely Propagating Terahertz Pulses by Diffraction, <i>Appl. Phys. Lett.</i> <i>IEEE-JSTQE</i> , 2 , 701 (1996) <i>Vol.2, No. 3</i>
SL	11)	X.-C. Zhang and Q. Wu. "New Terahertz Beams Imaging Device," <i>Optics & Photonics News</i> , 12 , 9 (1996)
SL	12)	X.-C. Zhang, Q. Wu, and T. D. Hewitt, "Electro-Optic Imaging of Terahertz Beams," <i>Ultrafast Phenomena X, Springer Series in Chemical Physics</i> , 54 (1996)
SL	13)	Z. G. Lu, P. Campbell, and X.-C. Zhang, "Free Space Electro-Optic Sampling With a High-Repetition-Rate Regenerative Amplified Laser," <i>Appl. Phys. Lett.</i> , 71 , 593 (1997)
SL	14)	Zhiping Jiang, F. G. Sun, Q. Chen, and X.-C. Zhang, "Electro-Optic Sampling Near Zero Optical Transmission Point," <i>Appl. Phys. Lett.</i> , 74 , 1191 (1999)
SL	15)	Y. Cai et al., "Coherent Terahertz Radiation Detection: Direct Comparison Between Free-Space Electro-Optic Sampling and Antenna Detection," <i>Appl. Phys. Lett.</i> , 73 , 444 (1998)
SL	16)	Q. Wu and X.-C. Zhang, "Design and Characterization of Traveling Wave Electro-Optic Terahertz Sensors," <i>IEEE J. Sel. Top. Quantum Electron.</i> , 2 , 693 (1996)

Examiner	<i>SL Lee</i>	Date Considered	<i>3/10/03</i>
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OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

SL	17)	C. Winnewisser et al., "Electro-Optic Detection of THz Radiation in LiTaO ₃ , LiNbO ₃ and ZnTe," <i>Appl. Phys. Lett.</i> , 70 , 3069 (1997)
SL	18)	A. Nahata, A. Weling, and T. Heinz, "A Wideband Coherent Terahertz Spectroscopy System Using Optical Rectification and Electro-Optic Sampling," <i>Appl. Phys. Lett.</i> , 69 , 2321 (1996)
SL	19)	G. Mourou et al., "Picosecond Microwave Pulse Generation," <i>Appl. Phys. Lett.</i> , 38 , 470 (1981)
SL	20)	D. H. Auston et al., "Picosecond Photoconducting Hertzian Dipoles," <i>Appl. Phys. Lett.</i> , 45 , 284 (1984)
SL	21)	A. P. DeFonzo, M. Jarwala, and C. R. Lutz, "Transient Response of Planar Integrated Optoelectronic Antennas," <i>Appl. Phys. Lett.</i> , 50 , 1155 (1987)
SL	22)	Ch. Fattinger and D. Grischkowsky, "Point Source Terahertz Optics," <i>Appl. Phys. Lett.</i> , 53 , 1480 (1988)
SL	23)	P. R. Smith, D. H. Auston, and M. C. Nuss, "Subpicosecond Photoconducting Dipole Antennas," <i>IEEE J. Quantum Electron.</i> , 24 , 255 (1988)
SL	24)	D. Grischkowsky et al., "Far-Infrared Time-Domain Spectroscopy With Terahertz Beams of Dielectrics and Semiconductors," <i>J. Opt. Soc. Am.-B.</i> , 7 , 2006 (1990)
SL	25)	B. B. Hu and M. C. Nuss, "Imaging With Terahertz Waves," <i>Opt. Lett.</i> , 20 , 1716 (1995)
SL	26)	R. A. Cheville, D. Grischkowsky, "Time Domain Terahertz Impulse Ranging Studies," <i>Appl. Phys. Lett.</i> , 67 , 1960 (1995)
SL	27)	D. M. Mittleman et al., "T-Ray Tomography," <i>Opt. Lett.</i> , 22 , 904 (1997)
SL	28)	D. Mittleman et al., "T-Ray Imaging," <i>IEEE J. Sel. Top. Quantum Electron.</i> , 2 , 679 (1996)
SL	29)	A. Nahata et al., "High-speed Electrical Sampling Using Optical Second-Harmonic Generation," <i>Appl. Phys. Lett.</i> 69 , 746 (1996)

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